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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,119	10/21/2003	Clayton Gibbs	TI-34137	3655

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EXAMINER

FRANKLIN, RICHARD B

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,119

Applicant(s)

GIBBS ET AL.

Examiner

Richard Franklin

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1 – 9 have been examined.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 113 (Figs 1 and 5), 114 (Figs 1 and 5), 115 (Figs 1 and 5), 116 (Figs 1 and 5), 402 (Fig 4), 427 (Fig 4), 509 (Fig 5), 510 (Fig 5), 425 (Fig 6). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claims 6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. As per Claim 6, the it is not clear if the burst transfer discussed in Claim 6 is the same as or different from the burst transfer discussed in Claim 5.
- b. As per Claim 8, the phrase "supplies aid predetermined amount" the term "aid" is not used correctly.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Secatch US Patent Application Publication No. 2003/0172206 A1.

Secatch teaches a first-in-first-out buffer (FIFO) that generates flags when the amount of data in the FIFO reaches a certain amount (Full and Empty). The generation of the flags leads to the initialization of a data transfer to or from the FIFO (Paragraph [0016]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Secatch US Patent Application Publication No. 2003/0172206 A1 in view of Khatib (FIFO, First-In First-Out Memory).

Secatch teaches a FIFO that generates flags when the amount of data in the FIFO reaches a certain amount as described per claim 2.

Secatch does not teach where the amount of data in the FIFO for a flag generation is the point where the FIFO is half full. Secatch also does not teach where the flag generating event is the changing of the amount of data in the FIFO from less than to more than half full or from more than to less than half full.

Khatib teaches a FIFO with a flag that is generated when the FIFO is half full (Page 4 – 5).

It would have been obvious to one of ordinary skill in the art at the time of invention to include the half full flag of Khatib in the FIFO of Secatch. Including the half full flag in the FIFO allows the triggering of an event sooner than only using a full flag.

As to the flag generating event, it would have been obvious to one of ordinary skill to make the triggering event of the half full flag be either when the amount of data in the FIFO changes from less than to more than half full or from more than half full.

6. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Secatch US Patent Application Publication No. 2003/0172206 A1 in view of Johnson US Patent Application No. 2004/0010637 A1.

Secatch teaches a FIFO that generates flags when the amount of data in the FIFO reaches a certain amount as described per claim 1.

Secatch does not teach where the data transfer is a transfer of a predetermined amount of data in a fixed number of sequential clock cycles. Secatch also does not teach where the predetermined amount of data in a burst transfer is set be an input to a programmable FIFO device register.

Johnson teaches a memory storage device where control pins on the device are used to dynamically or hard set the burst length of the device (Johnson; Paragraph [0021], Claim 1).

It would have been obvious to one of ordinary skill in the art at the time of invention to include the burst length specifying of Johnson in the FIFO of Secatch because that allows for the burst length to be set while the memory core is in use and without having to wait until after the change is complete to initialize another access operation (Johnson; Paragraph [0010]).

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Secatch US Patent Application Publication No. 2003/0172206 A1 in view of Uchida et al. US Patent No. 6,545,942 B2.

Secatch teaches a FIFO that generates flags when the amount of data in the FIFO reaches a certain amount as described per claim 1.

Secatch does not teach where inhibiting the trigger of a data transfer further includes inhibiting triggering transfers of data for a predetermined amount of time after the end of the current data transfer.

Uchida et al. teach a memory device that allows a data transfer after a predetermined amount of time has passed from the end of a burst data transfer (Uchida et al.; Claim 17).

It would have been obvious to one of ordinary skill in the art at the time of invention to include the delay of data transferring of Uchida et al. in the FIFO of Secatch to avoid interferences between two commands (Uchida et al.; Col 5 lines 14 – 23).

Conclusion

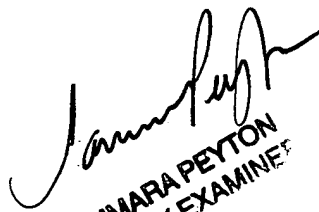
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Franklin whose telephone number is (571)272-0669. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571)272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard Franklin
Patent Examiner
Art Unit 2182



TAMMARA PEYTON
PRIMARY EXAMINER